

Minutes of the

RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

DATE: January 11, 2016
TIME: 9:00 a.m.
PLACE: Auditorium
Ives Grove Office Complex
14200 Washington Avenue
Sturtevant, WI

Members Present

Julie A. Anderson.....Director, Racine County Public Works and Development Services
Chair
Kenneth R. Yunker Executive Director, SEWRPC
Secretary
Anthony A. Bunkelman Village Engineer, Village of Caledonia
Peter Christensen President, Village of Wind Point
Rebecca Ewald..... Administrator, Village of Waterford
Peter L. Hansen..... Chairperson, Town of Yorkville
Ken Hinz Supervisor, Department of Public Works, Town of Waterford
(Representing Tom Hincz)
Thomas R. Kramer..... Administrator/Treasurer, Town of Norway
Jeff Lang Supervisor IV, Town of Burlington
(Representing Ralph Rice)
Tim McElmeel Urban and Regional Planner, Southeast Region
(Representing Brett Wallace) Wisconsin Department of Transportation
Robert Miller..... Mayor, City of Burlington
Nathan Plunkett..... County Engineer, Racine County Department of
Public Works and Development Services
John Rooney..... City Engineer/Assistant Commissioner of Public Works,
(Representing Mark H. Yehlen) City of Racine

Guests and Staff Present

Michael G. Hahn..... Deputy Director, SEWRPC
Christopher T. HiebertChief Transportation Engineer, SEWRPC
Ryan W. Hoel..... Principal Engineer, SEWRPC
Tom Longtin State Program Engineer, Southeast Region,
Wisconsin Department of Transportation

ROLL CALL AND INTRODUCTIONS

Chair Anderson called the meeting of the Racine County Jurisdictional Highway Planning Committee to order at 9:00 a.m. Attendance was taken by circulating a sign-in sheet for signature. Chair Anderson then asked the Committee members, guests, and staff present to introduce themselves.

REVIEW AND APPROVAL OF MINUTES OF THE MEETING HELD FEBRUARY 10, 2015

Chair Anderson stated that the next item on the agenda is consideration of approval of the minutes for the previous Committee meeting held on February 10, 2015. Mr. Hansen made a motion to approve the minutes for the February 10, 2015 Committee meeting. The motion was seconded by Ms. Ewald and was approved unanimously by the Committee.

PRESENTATION AND DISCUSSION ON VISION 2050 DETAILED ALTERNATIVE LAND USE AND TRANSPORTATION PLANS AND THEIR EVALUATION

Chair Anderson asked Mr. Yunker to present the VISION 2050 detailed alternative land use and transportation plans and their evaluation. Referring to the VISION 2050 alternatives handout, Mr. Yunker stated that the Commission staff developed and evaluated three detailed year 2050 land use and transportation plans. He stated that the Trend is a projection to the year 2050 of land use and transportation trends of the last 15 years, including lower density development and declines in public transit service. He stated that Alternatives I and II were developed based on public input from the initial visioning stage of VISION 2050 and include higher density land use development patterns and expanded public transit service. The three alternatives were evaluated and compared using a set of objectives and 50 criteria organized under four themes—healthy communities, mobility, cost and financial stability, and equitable access. He noted that public feedback on the alternatives and their evaluation, including comments from this Committee, will help determine which aspects of the alternatives will be included in the VISION 2050 Preliminary Recommended Plan. Committee members had no comments or questions following Mr. Yunker's review of the VISION 2050 alternatives and their evaluation.

DISCUSSION ON FUNCTIONAL IMPROVEMENTS TO THE RACINE COUNTY ARTERIAL STREET AND HIGHWAY SYSTEM TO BE CONSIDERED FOR THE VISION 2050 PRELIMINARY RECOMMENDED REGIONAL LAND USE AND TRANSPORTATION PLAN .

Chair Anderson asked Mr. Yunker to present the Commission staff's analysis of Racine County arterial street and highway functional improvement issues raised by the Racine County Jurisdictional Highway Planning Committee at its previous meeting held on February 10, 2015.

[Secretary's Note: A document summarizing the Commission staff's initial response to functional improvement issues raised by the Racine County Highway Jurisdictional Committee is included with these minutes as Attachment A.]

Alternatives to the Planned Extension of STH 38 between Five Mile Road and the Existing STH 38

Mr. Yunker stated that during the development of the year 2035 regional transportation plan completed in 2006, the Wisconsin Department of Transportation (WisDOT) was conducting the preliminary engineering and environmental impact study for the reconstruction of STH 38 with additional traffic lanes between Oakwood Road in Milwaukee County and Northwestern Avenue (CTH K), and had identified a locally preferred alternative. He noted that the locally preferred alternative included the realignment of STH 38 between Five Mile Road and STH 38. He further stated that following the completion of the year 2035 plan in 2006, which included the realignment of STH 38 between Five Mile Road and STH 38, the STH 38 project was enumerated in the major highway program in the 2011-2013 State biennial budget. Mr. Yunker indicated that WisDOT subsequently suspended work on the STH 38 project due to there no longer being a consensus on a preferred alternative between the concerned local governments and WisDOT, and he further stated that in 2015 the STH 38 project was removed from the major highway program in the 2015-2017 State biennial budget.

Mr. Yunker indicated that as there is no longer consensus on the project to reconstruct this segment of STH 38, and the project is no longer enumerated in the State's major highway program, Commission staff recommends that the Preliminary Recommended Plan not include the realignment of STH 38 between Five Mile Road and STH 38. He added that, with respect to the need for four traffic lanes on STH 38 between the Racine County line and W. River Road, Commission staff recommends that the Preliminary Recommended Plan include the reservation of right-of-way along STH 38 between the Milwaukee-Racine County line and River Road to accommodate possible future improvement of the facility beyond the design year of the plan, as well as the reservation of right-of-way along Six Mile Road between W. River Road and Douglas Avenue (STH 32) to accommodate possible future improvement of the facility beyond the design year of the plan. Committee members concurred with Commission staff's recommendations.

Chair Anderson noted that in addition to suspending work on the STH 38 project, WisDOT plans on resurfacing Douglas Avenue (STH 32) between Six Mile Road and STH 32 rather than reconstructing it with additional traffic lanes.

Need for Four Traffic Lanes on Washington Avenue (STH 20) between N. Raynor Avenue (USH 45) and Spring Street (CTH C)

Mr. Yunker stated as forecast year 2050 average weekday traffic volumes may be expected to approach, but not exceed, the design capacity of Washington Avenue (STH 20) between N. Raynor Avenue (USH 45) and Spring Street (CTH C), Commission staff recommends that the Preliminary Recommended Plan include the reservation of right-of-way along this segment of STH 20 to accommodate possible future improvement of the facility beyond the design year of the plan. Committee members concurred with Commission staff's recommendation.

Need for Four Traffic Lanes on Durand Avenue (STH 11) between Shumann Drive and IH 94

Mr. Yunker stated as forecast year 2050 average weekday traffic volumes may be expected to approach, but not exceed, the design capacity of Durand Avenue (STH 11) between Shumann Drive in the Village of Union Grove and IH 94, Commission staff recommends that the Preliminary Recommended Plan include the reservation of right-of-way along this segment of STH 11 to accommodate possible future improvement of the facility beyond the design year of the plan. Committee members concurred with Commission staff's recommendation.

4½ Mile Road and its Extension between Douglas Avenue (STH 32) and Erie Street as an Alternative to Five Mile Road and its Extension between Douglas Avenue (STH 32) and Erie Street

Mr. Yunker explained that the planned extension of Five Mile Road has long been recommended to provide a generally one-mile grid of arterial roadways to serve the planned urban development in the Village of Caledonia east of Douglas Avenue (STH 32) and provide an east-west arterial extending between Howell Road (CTH H) and Erie Street. He further stated that, as an alternative to the planned extension of Five Mile Road, the extension of 4½ Mile Road between STH 32 and Erie Street would provide less than the desirable one-mile spacing for arterial facilities within medium density urban development, and would not provide system continuity between CTH H and Erie Street. Mr. Yunker noted, however, that the planned extension of Five Mile Road between STH 32 and Erie Street would require construction of two new segments of roadway—totaling about 0.50 miles—that would include a new stream crossing, while the proposed extension of 4 ½ Mile Road between STH 32 and Erie Street would require construction of one segment of roadway—totaling about 0.24 miles—that would not require a new stream crossing.

Mr. Yunker stated that, to minimize the amount of new roadway construction and to eliminate the need for a new stream crossing, Commission staff recommends that the Preliminary Recommended

Plan include 4 ½ Mile Road and its extension between STH 32 and Erie Street, rather than Five Mile Road and its extension between STH 32 and Erie Street. Committee members concurred with Commission staff's recommendation.

Need for Four Traffic Lanes on Seven Mile Road between IH 94 and Douglas Avenue (STH 32)

Mr. Yunker stated that as forecast year 2050 average weekday traffic volumes may be expected to be below the design capacity of Seven Mile Road between IH 94 and Douglas Avenue (STH 32), Commission staff recommends that the Preliminary Recommended Plan include resurfacing or reconstruction of this segment of Seven Mile Road to provide essentially the same capacity. Committee members concurred with Commission staff's recommendation.

Further Extending the Planned Extension of CTH V from Durand Avenue (STH 11) South to CTH KR

Mr. Yunker stated that the addition of the extension of CTH V between Durand Avenue (STH 11) and Braun Road to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned urban development of medium density. He further stated that the addition of the extension of CTH V between Braun Road and CTH KR may not be warranted by the year 2050, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned rural development.

Mr. Yunker indicated that the Commission staff recommends that the proposed extension of CTH V between STH 11 to Braun Road be included in the Preliminary Recommended Plan as a planned arterial street and highway. He further stated that the Commission staff recommends that the Preliminary Recommended Plan include the reservation of right-of-way for a possible extension of CTH V between Braun Road and CTH KR to serve potential future urban development that may occur beyond the design year of the plan. Committee members concurred with the Commission staff's recommendation. Mr. Yunker stated that, as a representative from the Village of Mount Pleasant did not attend this meeting, Commission staff will discuss with Village staff this issue following the meeting.

[Secretary's Note: Following the meeting, Commission staff discussed with the Village Engineer the issue of extending the planned extension of CTH V from Durand Avenue (STH 11) south to CTH KR. The Village Engineer concurred with the Commission staff's recommendation that the Preliminary Recommended Plan include the extension of CTH V between STH 11 to Braun Road, and that reservation of right-of-way be recommended for a possible extension of CTH V between Braun Road and CTH KR to serve potential future urban development that may occur beyond the design year of the plan.]

Further Extending the Planned Extension of Oakes Road between Braun Road and S. Green Bay Road (STH 31)

Mr. Yunker stated that addition of the extension of Oakes Road between Braun Road and S. Green Bay Road (STH 31) to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned urban development of medium density. He indicated that Commission staff recommends that the proposed extension of Oakes Road between Braun Road and STH 31 be included in the Preliminary Recommended Plan as a planned arterial street and highway. Committee members concurred with Commission staff's recommendation.

Extension of Willow Road between Durand Avenue (STH 11) and CTH KR

Mr. Yunker stated that the addition of the extension of Willow Road between Durand Avenue (STH 11) and Braun Road to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, and its location adjacent to existing and planned urban development of medium and high densities, while the addition of the extension of Willow Road between Braun Road and CTH KR may not be warranted by the year 2050, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned rural development.

Mr. Yunker stated that Commission staff recommends that the extension of Willow Road between STH 11 and Braun Road be included in the Preliminary Recommended Plan as a planned arterial street and highway. He further stated that Commission staff also recommends that the Preliminary Recommended Plan include the reservation of right-of-way for a possible extension of Willow Road between Braun Road and CTH KR to serve potential future urban development that may occur beyond the design year of the plan. Committee members concurred with Commission staff's recommendation. Mr. Yunker stated that, as a representative from the Village of Mount Pleasant did not attend this meeting, Commission staff will discuss with Village staff this issue following the meeting.

[Secretary's Note: Following the meeting, Commission staff discussed with the Village Engineer the issue of Willow Road between Durand Avenue (STH 11) and CTH KR. The Village Engineer concurred with the Commission staff's recommendation that the Preliminary Recommended Plan include the extension of Willow Road between STH 11 and Braun Road, and that the reservation of right-of-way be recommended for a possible extension of Willow Road between Braun Road and CTH KR to serve potential future urban development that may occur beyond the design year of the plan.]

Need for Four Lanes along Main Street and the Potential Need to Provide another Crossing of the Fox River in the Village of Waterford

Mr. Yunker stated that WisDOT has completed a preliminary engineering and environmental impact study for the reconstruction of Main Street/First Street/Beck Drive (STH 20/STH 83) between Buena Park Road and STH 36, which includes the reconstruction of Main Street between S. 1st Street and Milwaukee Street, and has selected a preferred alternative. The preferred alternative includes reconstructing Main Street with two traffic lanes between Buena Park Road and Milwaukee Street, while providing sufficient pavement to allow for four traffic lanes in the future along the segment of Main Street between Buena Park Road and S. 1st Street. Mr. Yunker stated that Commission staff recommend that the Preliminary Recommended Plan incorporate WisDOT's preferred alternative. Mr. Yunker further stated that as forecast year 2050 average weekday traffic volumes may be expected to be at the design capacity along the segment of Main Street between First Street and Milwaukee Avenue, Commission staff recommends that the Preliminary Recommended Plan include resurfacing or reconstruction of the segment of Main Street between S. 1st Street and Milwaukee avenue to provide essentially the same capacity. Committee members concurred with Commission staff's recommendation.

Mr. Yunker stated that the Commission staff was also asked to analyze the potential need for another river crossing in the Village. He stated that the STH 20/STH 83 crossing of the Fox River is currently the only river crossing in the Village, with the nearest crossing being about one and a half miles to the south at CTH D in the Village of Rochester and about four and one-half miles to the north at Bridge Drive. Mr. Yunker noted that Commission staff conducted a license plate study in the Village of Waterford in 2004 to determine the need for an additional river crossing in or near the Village. He

explained that the study indicated that about 95 percent of the traffic on STH 20/STH 83 in the Village has one or both ends of its travel within the Village, implying that a bypass route of STH 20/STH 83 around the Village would need to be located relatively close to the Waterford area to have the potential to attract any significant traffic from STH 20/STH 83 within the Village.

Mr. Yunker stated that one potential river crossing that was considered included a new crossing north of Main Street connecting E. Division Street on the east side of the river and North Street on the west side of the river (as shown on Map 1 of Attachment A). He noted that this crossing would have the potential to divert about 5,000 vehicles per average weekday from the existing Main Street Fox River bridge and from Main Street between S. 1st Street and Milwaukee Street. However, he noted that the new bridge would dramatically change the character of North Street and Division Street from very low volume land access streets to arterial streets, and also change the character of Jefferson Street between Main Street and North Street from a collector street to an arterial street. He further stated that this potential route and bridge would be a local arterial and the responsibility of the Village of Waterford to implement.

Mr. Yunker indicated that two potential river crossings were considered south of Main Street (as shown on Map 2 of Attachment A). He noted that these crossings would have the potential to accommodate a new route for STH 20/STH 83 in the Village, with the existing route and bridge then becoming the responsibility of the Village. He stated that these alternatives may be expected to divert about 12,000 vehicles per average weekday from Main Street between Jefferson and S. 1st Street and on S. 1st Street between the new route and Main Street. He further stated that the new route would remove traffic from the intersection of Main Street and S. 1st Street, which would assist in the operation of Main Street between S. 1st Street and Milwaukee Street.

Mr. Yunker stated that as existing and forecast future year 2050 traffic volumes could be accommodated in the existing and WisDOT proposed roadway width along Main Street between Buena Park Road and STH 36, Commission staff recommends that the Preliminary Recommended Plan not include a new crossing of the Fox River. Committee members concurred with Commission staff's recommendation.

Responding to an inquiry by Ms. Ewald, Mr. Yunker stated that the license plate study was conducted along STH 20/STH 83 through the Village in 2004. He stated that Commission staff recorded on handheld tape recorders the license plates of vehicles travelling on STH 20/STH 83 and the time in five minute intervals at two locations on STH 20/STH 83—one on both sides of the Village. He added that the recorded data was transcribed and then the license plates from the two locations were compared to identify any that matched within a reasonable timeframe. He stated that the matched license plates were assumed to be a trip that travelled through the Village of Waterford without one of the trip ends being within the Village.

Extension of Adams Road to Four Mile Road and the Addition of Four Mile Road between the Adams Road Extension and Nicholson Road to the Planned Racine County Arterial Street and Highway System

Mr. Yunker stated that the addition of the extension of Adams Road to Four Mile Road and the addition of Four Mile Road between the Adams Road extension and Nicholson Road to the Racine County arterial street and highway system would provide desirable arterial street and highway spacing, and would provide system continuity between IH 94 and N. Main Street (CTH G). Mr. Yunker stated that Commission staff recommends that the extension of Adams Road to Four Mile Road and the addition of Four Mile Road between the Adams Road extension and Nicholson Road be included in the Preliminary Recommended Plan as a planned arterial street and highway. Committee members concurred with Commission staff's recommendation.

Alternatives for Providing Higher Quality Access between IH 94 and the City of Racine

Mr. Yunker stated that the City of Racine Common Council adopted a resolution requesting that Commission staff work with the City of Racine, concerned and affected municipalities in Racine County, and Racine County to consider ways to improve highway access between IH 94 and the City of Racine as part of VISION 2050. He added that the issue of providing higher quality highway access between IH 94 and the City of Racine has long been discussed. Mr. Yunker stated that a route providing high quality access can be characterized as: 1) being direct and understandable; 2) providing adequate traffic carrying capacity; and 3) allowing efficient travel through higher speed limits, limited traffic control, and a high level of direct land access control. He further stated that the Commission staff analyzed the quality of access provided by various routes between IH 94 and the City of Racine based on these three characteristics. Mr. Yunker reviewed the Commission staff's evaluation of three existing major routes and three potential alternative routes. The routes include: 1) existing STH 11/STH 32; 2) existing STH 20/STH 32; 3) existing CTH K/STH 38; 4) proposed Four Mile Road/STH 32; 5) proposed CTH C/STH 38; and 6) proposed CTH KR/STH 32.

[Secretary's Note: Commission staff's analysis of alternatives for providing higher quality access between IH 94 and the City of Racine is included in these minutes as Attachment B; a table comparing the existing and potential alternative routes to provide high access between IH 94 and the City of Racine downtown area is included in these minutes as Attachment C; a map showing the three existing major routes and three potential alternative routes is included in these minutes as Attachment D; and a map showing the segments of existing and proposed routes from IH 94 to the City of Racine downtown area is included in these minutes as Attachment E.]

Mr. Yunker noted that Commission staff would conduct a travel time survey for each of the six identified routes between IH 94 and downtown Racine and report its findings. He stated that the next step would be to identify two or three of the highest priority routes and develop recommendations to improve the accessibility of each route. He indicated Commission staff would be seeking feedback from the other concerned and impacted communities, Racine County, and WisDOT.

Mr. Miller expressed concern over the ability to provide four traffic lanes on some segments of roadway without restricting existing parking. Mr. Yunker stated that any proposed widening along any of these routes would be based on whether existing or forecast future year 2050 traffic forecast volume exceed the design capacity of the existing roadway. He stated that, in addition to the potential widening of a facility, access management measures and traffic signal coordination along the routes would be considered.

Responding to an inquiry by Mr. Rooney, Mr. Yunker stated that an intersection was identified on the map as a "confusing intersection" based on it presenting difficulty in providing a direct and understandable route from IH 94 to the downtown IH 94 area. He added that maybe there is a better way to identify such intersections.

With respect to the identified confusing intersections, Mr. Rooney stated that many of the issues associated with these intersections will be addressed in future construction projects. For example, he noted that the City of Racine has applied for Federal Highway Administration Highway Safety Improvement (HSIP) funding to reconstruct the intersection of STH 38 and State Street. In addition, he noted that STH 32 (Douglas Avenue/Hamilton Street) is scheduled to be reconstructed from Gould Street to Main Street, and that some of the difficulties at these intersections could be addressed as part of that project. Chair Anderson indicated that WisDOT is considering options to reconstruct the

intersection of CTH MM and STH 38. She noted that a roundabout is proposed to be constructed at the intersection of CTH K and CTH V.

Mr. Plunkett noted that Kenosha County is responsible for maintaining the portion of CTH KR between IH 94 and Meachem Road and Racine County is responsible for maintaining the portion of CTH KR between Meachem Road and STH 32.

In addition to the Commission staff's analysis of Racine County arterial street and highway functional improvement issues raised by the Committee, the Commission staff proposed additional functional improvement changes for the Committee to consider:

Need for Eight Traffic Lanes on N. Green Bay Road (STH 31) between Spring Street (CTH C) and N. Green Bay Road (CTH MM)

Mr. Yunker stated as forecast year 2050 average weekday traffic volumes may be expected to exceed the design capacity of STH 31 between CTH C and CTH MM, Commission staff recommends that the Preliminary Recommended Plan include the widening of this segment of STH 31 from six to eight traffic lanes. Committee members concurred with Commission staff's recommendation.

Chair Anderson noted that WisDOT intends to resurface STH 31 between STH 20 and CTH MM in 2017.

Mr. Rooney suggested that the speed limit be increased on STH 31 from CTH MM to STH 11. Chair Anderson noted that the Village of Mount Pleasant had in the past considered increasing the speed limit on STH 31.

Reservation of Right-of-Way along Three Mile Road between Douglas Avenue (STH 32) and Lasalle Street

Mr. Rooney stated that the City of Racine has widened to four traffic lanes Three Mile Road between Main Street (CTH G) and Lasalle Street, and stated that the City is working with the Village of Caledonia to reconstruct with additional traffic lanes Three Mile Road between STH 32 and Lasalle Street. Mr. Yunker stated that the Preliminary Plan will include the widening of Three Mile Road between STH 32 and Lasalle Street.

Reservation of Right-of-Way along Six Mile Road (CTH G) between STH 31 and Douglas Avenue (STH 32)

Mr. Yunker stated as forecast year 2050 average weekday traffic volumes may be expected to approach, but not exceed, the design capacity of CTH G between STH 31 and STH 32, Commission staff recommends that the Preliminary Recommended Plan include the reservation of right-of-way along this segment of CTH G to accommodate possible future improvement of the facility beyond the design year of the plan rather than recommending future widening to four traffic lanes.

Mr. Christensen expressed concern over the lack of higher speed connections for the Village of Wind Point and suggested that this segment of CTH G be widened. Mr. Yunker added that this roadway was proposed for the reservation of right-of-way for the potential future widening to four traffic lanes as the future traffic volumes on this roadway are not expected to exceed its design capacity by the year 2050.

Reservation of Right-of-Way along Spring Street (CTH C) between S. Fancher Road (CTH H) and Airline Road

Mr. Yunker stated as forecast year 2050 average weekday traffic volumes may be expected to approach, but not exceed, the design capacity of CTH C between CTH H and Airline Road,

Commission staff recommends that the Preliminary Recommended Plan include the reservation of right-of-way along this segment of CTH C to accommodate future improvement of the facility beyond the design year of the plan rather than recommending future widening to four traffic lanes.

Mr. Hinz stated that he believes that the right-of-way along STH 164 north of STH 36 to the Waukesha County line was already purchased to provide a wider cross-section. Mr. Yunker responded that the Commission staff is suggesting that the Preliminary Plan show the reservation of right-of-way for a potential widening of this roadway beyond the year 2050, based on forecast year 2050 average weekday traffic volumes.

[Secretary's Note: Attachment F to these minutes shows the functional improvements to the arterial street and highway system in Racine County under the year 2050 Preliminary Recommended Plan.]

NEXT MEETING

Mr. Yunker stated that the next meeting of this Committee will be scheduled after the Preliminary Recommended Plan has been completed.

ADJOURNMENT

There being no further business to come before the Committee, on a motion by Mr. Hansen, seconded by Ms. Ewald, and carried unanimously, the meeting was adjourned at 10:40 am.

Respectfully submitted,

Kenneth R. Yunker
Secretary

ANALYSIS OF RACINE COUNTY ARTERIAL STREET AND HIGHWAY FUNCTIONAL IMPROVEMENT ISSUES RAISED BY THE RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Members of the Racine County Jurisdictional Highway Planning Committee identified at their February 10, 2015 meeting, functional improvement—widening and new facilities—issues for the Racine County arterial street and highway system to be considered as part of VISION 2050—a major update to the regional land use and transportation plans. The Commission staff's initial response to these functional improvement issues raised is as follows:

- ***Consider alternatives to the planned extension of STH 38 between Five Mile Road and the existing STH 38 in the Village of Caledonia***
 - Existing AWDT Design Capacity: 14,000
 - Existing 2014 AWDT volume:
 - Howell Avenue (Racine County line to Seven Mile Road): 7,800
 - Howell Avenue (Seven Mile Road to Six Mile Road): 10,000
 - Six Mile Road (Howell Avenue to River Road): 10,300 to 10,800
 - STH 38 (Six Mile Road to CTH K): 4,300 to 4,800
 - Forecast year 2050 AWDT:
 - Howell Avenue (Racine County line to Seven Mile Road): 9,500
 - Howell Avenue (Seven Mile Road to Six Mile Road): 11,500
 - Six Mile Road (Howell Avenue to River Road): 11,500
 - STH 38(Six Mile Road to CTH K): 5,500 to 7,000
 - During the development of the year 2035 regional transportation plan completed in 2006, the Wisconsin Department of Transportation (WisDOT) was conducting the preliminary engineering and environmental impact study for the reconstruction of STH 38 with additional traffic lanes between Oakwood Road and CTH K, and had identified a preferred alternative. The locally preferred alternative included the realignment of STH 38 between Five Mile Road and STH 38. Following the completion of the year 2035 plan in 2006, the STH 38 project was enumerated in the major highway program in the 2011-2013 State biennial budget. However, WisDOT suspended work on the STH 38 project due to there no longer being a consensus on a preferred alternative between the affected and concerned local governments and WisDOT. In 2015, the STH 38 project was removed from the major highway program in the 2015-2017 State biennial budget.
 - Commission staff recommendation: As there is (1) no longer consensus on the project to reconstruct STH 38 with additional traffic lanes between Oakwood Road in Milwaukee County and CTH K in Racine County, which included the extension of STH 38 between Five Mile Road and CTH K, and (2) the project is no longer enumerated in the State's major highway program, Commission staff recommends that the preliminary recommended year 2050 regional transportation plan not include the realignment of STH 38 between Five Mile Road and CTH K.

With respect to the need for four traffic lanes on STH 38 between the Racine County line and River Road by the design year 2050, it is also recommended that the preliminary recommended plan recommend the reservation of right-of-way along STH 38 between Racine County Line and River Road to accommodate possible future improvement of the

facility beyond the design year of the plan, and to also include the reservation of right-of-way along 6 Mile Road between River Road and STH 32.

- ***Consider the need for four traffic lanes on Washington Avenue (STH 20) between N. Raynor Avenue (USH 45) and CTH C (Spring Street) in the Town of Yorkville***
 - Existing AWDT Design Capacity: 14,000
 - Existing AWDT volume:
 - N. Raynor Avenue (USH 45) to N. Colony Avenue (USH 45): 10,400 (2011)
 - N. Colony Avenue (USH 45) to Raymond Avenue (CTH U): 7,100 (2008)
 - Raymond Avenue (CTH U) to Spring Street (CTH C): 9,300 (2008)
 - Forecast year 2050 AWDT:
 - N. Raynor Avenue (USH 45) to N. Colony Avenue (USH 45): 12,000
 - N. Colony Avenue (USH 45) to Raymond Avenue: 8,000
 - Raymond Avenue to Spring Street (CTH C): 10,500
 - Commission staff recommendation: As the forecast year 2050 average weekday traffic volumes may be expected to approach but not exceed the design capacity of this segment of STH 20 by the design year 2050, Commission staff recommends that the preliminary recommended year 2050 regional transportation plan include the reservation of right-of-way along STH 20 between N. Raynor Avenue (USH 45) and Spring Street (CTH C) to accommodate possible future improvement of the facility beyond the design year of the plan.
- ***Consider the need for four traffic lanes on Durand Avenue (STH 11) between Shumann Drive in the Village of Union Grove and IH 94 in the Town of Yorkville***
 - Existing AWDT Design Capacity: 14,000
 - Existing year 2014 AWDT volume: 7,600 to 9,000
 - Forecast year 2050 AWDT: 9,500 to 10,500
 - Commission staff recommendation: As the forecast year 2050 average weekday traffic volumes may be expected to approach but not exceed the design capacity of this segment of Durand Avenue (STH 11) by the design year 2050, Commission staff recommends that the preliminary recommended year 2050 regional transportation plan include the reservation of right-of-way along Durand Avenue (STH 11) between Shumann Drive in the Village of Union Grove and IH 94 to accommodate possible future improvement of the facility beyond the design year of the plan.
- ***Consider 4½ Mile Road and its extension between STH 32 and Erie Street as an alternative to Five Mile Road and its extension between STH 32 and Erie Street in the Village of Caledonia.***
 - The planned extension of Five Mile Road has long been recommended to (1) provide a generally one-mile grid of arterial roadways to serve the planned urban development in the Village of Caledonia east of STH 32; and (2) provide an east-west arterial facility route extending between CTH H (Howell Road) and Erie Street.
 - The extension of 4½ Mile Road between STH 32 and Erie Street would provide (1) less than the desirable one- mile spacing for arterial facilities within medium density urban

development, and (2) would not provide system continuity between CTH H and Erie Street.

- The completion of the planned extension of Five Mile Road between STH 32 and Erie Street requires construction of two new segments of roadway (totaling 0.50 miles) and includes the crossing of a stream, while the proposed extension of 4 ½ Mile Road between STH 32 and Erie Street would require construction of one segment of roadway (totaling 0.24 miles) and would not require a new crossing of a stream.
- Commission staff recommendation: It is recommended that 4 ½ Mile Road and its extension between STH 32 and Erie Street, rather than Five Mile Road and its extension between STH 32 and Erie Street, be included in the year 2050 preliminary recommended regional transportation system plan, to eliminate the need for another river crossing and the need to construct about 0.26 miles of new roadway.
- ***Consider the need for four traffic lanes on Seven Mile Road between IH 94 and Douglas Avenue (STH 32) in the Village of Caledonia.***
 - Existing AWDT Design Capacity: 14,000
 - Existing year 2011 AWDT volume:
 - IH 94 to STH 38: 4,700
 - STH 38 to W. River Road: 1,800
 - W. River Road to Douglas Avenue (STH 32): 950
 - Forecast year 2050 AWDT:
 - IH 94 to STH 38: 5,000
 - STH 38 to W. River Road: 2,500
 - W. River Road to Douglas Avenue (STH 32): 1,500
 - Commission staff recommendation: As the forecast year 2050 average weekday traffic volumes may be expected to be below the design capacity of this segment of Seven Mile Road by the year 2050, it is recommended that the preliminary recommended year 2050 regional transportation plan recommend the maintaining of Seven Mile Road with essentially the same capacity between IH 94 and STH 32 (Douglas Avenue).
- ***Consider further extending the planned extension of CTH V from Durand Avenue (STH 11) south to CTH KR in the Village of Mount Pleasant.***
 - The addition of the extension of CTH V between STH 11 and Braun Road to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned urban development of medium density.
 - The addition of the extension of CTH V between Braun Road and CTH KR may not be warranted by the year 2050, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned rural development.
 - Commission staff recommendation: It is recommended that the proposed extension of CTH V between STH 11 to Braun Road be included in the preliminary recommended year 2050 regional transportation plan as a planned arterial street and highway, as it would serve planned urban development of medium density. Additionally, it is recommended that the preliminary recommended year 2050 plan include the reservation

of right-of-way for an extension of CTH V between Braun Road and CTH KR to serve potential future urban development that may occur beyond the design year of the plan.

- ***Consider further extending the planned extension of Oakes Road between Braun Road and S. Green Bay Road (STH 31) in the Village of Mount Pleasant.***
 - The addition of the extension of Oakes Road between Braun Road and S. Green Bay Road (STH 31) to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned urban development of medium density.
 - Commission staff recommendation: Commission staff recommends that the proposed extension of Oakes Road between Braun Road and STH 31 be included in the preliminary recommended year 2050 regional transportation plan as a planned arterial street and highway, as this segment of roadway would serve existing and planned residential of medium density.
- ***Consider the extension of Willow Road between Durand Avenue (STH 11) and CTH KR in the Village of Mount Pleasant.***
 - The addition of the extension of Willow Road between STH 11 and Braun Road to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, and its location adjacent to existing and planned urban development of medium and high densities.
 - The addition of the extension of Willow Road between Braun Road and CTH KR may not be warranted by the year 2050, based on its spacing with adjacent arterial streets and highways, and its location adjacent to planned rural development.
 - Commission staff recommendation: It is recommended that the extension of Willow Road between STH 11 and Braun Road be included in the preliminary recommended year 2050 regional transportation plan as a planned arterial street and highway, as this segment of roadway would serve existing and planned urban development of medium and high densities. Additionally, it is recommended that the preliminary recommended plan recommend the reservation of right-of-way for an extension of Willow Road between Braun Road and CTH KR to serve potential future urban development that may occur beyond the design year of the plan.
- ***Consider the need for four lanes along Main Street and the potential need to provide another crossing of the Fox River in the Village of Waterford.***
 - Existing AWDT Design Capacity: 14,000
 - Existing year 2014 AWDT volume:
 - W. Main Street between Buena Park Road and First Street: 14,500 to 15,800
 - E. Main Street between First Street and Milwaukee Street: 11,800
 - E. Main Street between Milwaukee Street and STH 36: 6,000
 - Forecast year 2050 AWDT:
 - W. Main Street between Buena Park Road and First Street: 19,000 to 20,000
 - E. Main Street between First Street and Milwaukee Street: 14,000
 - E. Main Street between Milwaukee Street and STH 36: 8,000

- The existing cross-section along Main Street between Buena Park Road and STH 36 is as follows:
 - Between Buena Park Road and Rivermoor Drive – two traffic lane rural roadway approximately 24 feet in width with shoulders three to six feet in width and open ditch drainage.
 - Between Rivermoor Drive and Jefferson Street – two traffic lane urban roadway approximately 40 feet in width with two parking/auxiliary lanes.
 - Between Jefferson Street to the Fox River – two traffic lane urban roadway approximately 61 feet in width with two traffic lanes and two parking lanes.
 - On the bridge over the Fox River and from the Fox River to STH 36 – two traffic lane urban roadway approximately 48 feet in width with two parking/auxiliary lanes.
- WisDOT has completed a preliminary engineering and environmental impact study for the reconstruction of Main Street/First Street/Beck Drive (STH 20/STH 83) between Buena Park Road and STH 36, which includes the reconstruction of Main Street between First Street and Milwaukee Street, and has selected a preferred alternative. The preferred alternative includes reconstructing Main Street with two traffic lanes between Buena Park Road and Milwaukee Street. Sufficient pavement would be provided to allow four traffic lanes in the future on the portion of Main Street between Buena Park Road and First Street. The locally preferred alternative proposes that an urban roadway of 54 feet in width be provided on Main Street between Buena Park Road and Jefferson Street. Between Jefferson Street and First Street, Main Street would be reconstructed with essentially the same roadway width (61 feet), with the existing roadway on the bridge being widened from 48 feet to 53 feet. Between First Street and Milwaukee Street, Main Street would be reconstructed with essentially the same roadway width (48 feet). Providing for a potential four traffic lanes along Main Street between Buena Park Road and First Street would address the existing and anticipated future traffic and congestion expected to occur along this segment of roadway.
- While the future forecast average weekday traffic volume is estimated to reach 14,000 vehicles—the design capacity of the existing two traffic lane roadway—on the portion of Main Street between First Street and Milwaukee Street by the year 2050, the existing two traffic lanes along this segment of roadway should be adequate for existing and future traffic volumes.
- The Main Street crossing of the Fox River is the only crossing within the Village of Waterford. Traffic through the Village or between areas east of the Fox River and areas west of the Fox River, including emergency vehicles, must traverse this crossing. The next closest crossing is approximately one and a half miles to the south at CTH D in the Village of Rochester and to the north, approximately four and one-half miles, at Bridge Drive.
- Commission staff had conducted in 2004 a license plate study for the Village of Waterford. The study indicated that less than 5 percent of the traffic on STH 20/STH 83 in the village is travelling through the Village. That is, about 95 percent of the traffic on STH 20/STH 83 in the Village has one or both ends of its travel within the Village. Thus, a bypass route of STH 20/STH 83 around the Village would need to be located relatively

close to the Waterford area to have the potential to attract any significant traffic from STH 20/STH 83 within the Village. The lakes to the north of the Village, existing development in the Village, and environmentally sensitive lands make such a route likely infeasible.

- Map 1 shows a potential river crossing within the Village north of Main Street, which would connect Division Street on the east side of the Fox River with North Street on the west. Analyses of a potential bridge at this location indicated that the new bridge may be expected to have the potential to divert some traffic—about 5,000 vehicles per average weekday—from the existing Main Street Fox River Bridge and from Main Street between First Street and Milwaukee Street. However, the new bridge would dramatically change the character of North Street and Division Street from very low volume land access streets to arterial streets, and also change the character of Jefferson Street between Main Street and North Street from a collector street to an arterial street. This potential route and bridge would be a local arterial and the responsibility of the Village of Waterford to implement.
- Map 2 shows two potential locations for an additional river crossing within the Village south of Main Street. These alternatives have the potential to be a new route for STH 20/STH 83 in the Village, with the existing route and bridge then becoming the responsibility of the Village of Waterford. These alternatives may be expected to relieve traffic on Main Street between Jefferson and First Streets and on First Street between the new bridge route and Main Street by removing about 12,000 vehicles per weekday from these roadway segments. They would remove traffic from the intersection of Main Street and First Street, which would assist in the operation of Main Street between First Street and Milwaukee Street.
- Commission staff recommendation: It is recommended that the preferred alternative identified by WisDOT in their preliminary engineering and environmental impact study be implemented. This recommendation of Main Street between Buena Park Road and First Street will provide the potential for the future provision of four traffic lanes on Main Street between Buena Park Road and First Street.

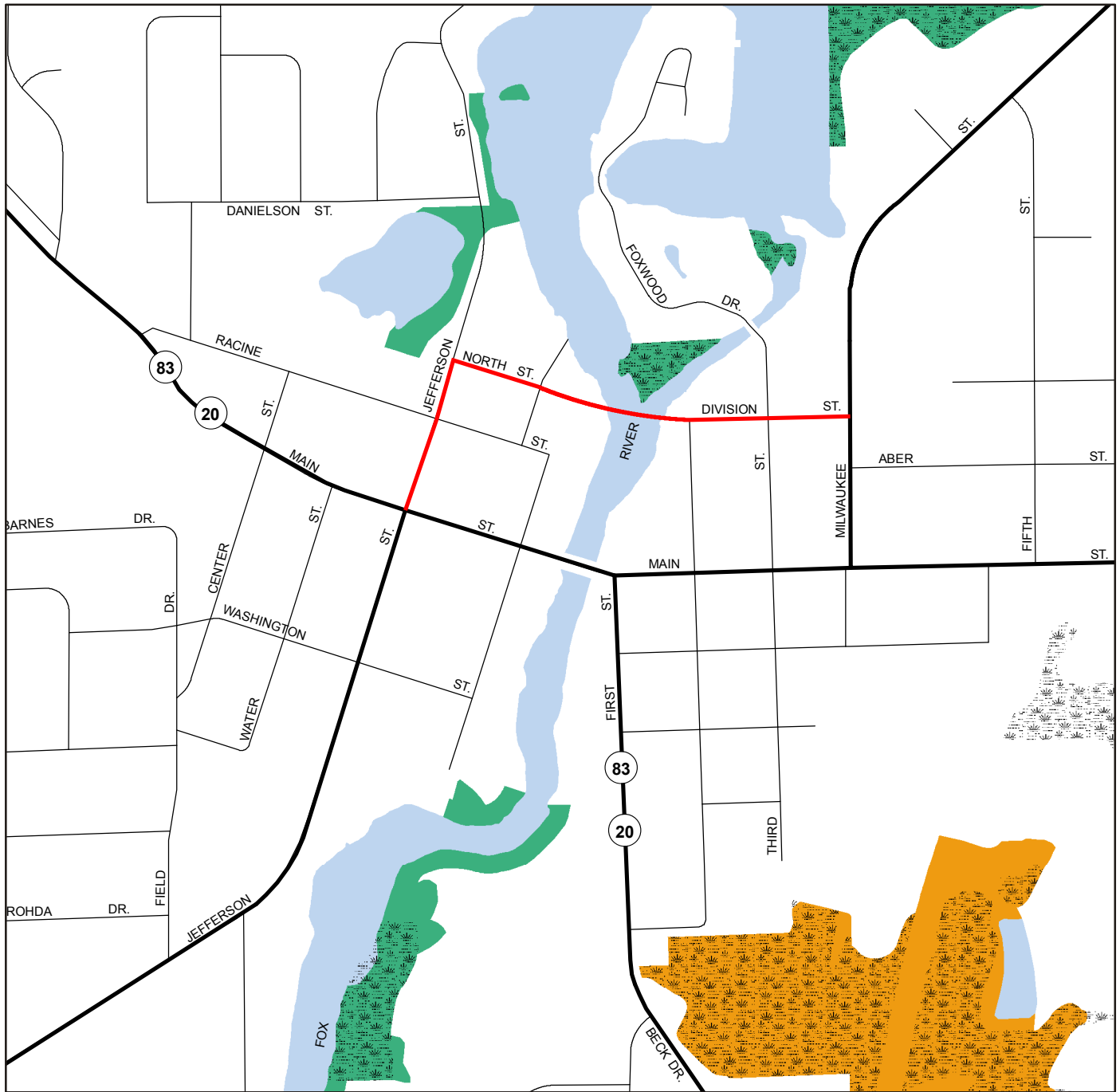
Additionally, as the forecast year 2050 average weekday traffic volumes may be expected to be at the design capacity of Main Street between First Street and Milwaukee Avenue, it is recommended that the preliminary recommended year 2050 plan recommend no need for additional traffic lanes on Main Street between First Street and Milwaukee Avenue.

It is also recommended preliminary recommended year 2050 regional transportation plan not include an additional crossing of the Fox River as existing and forecast future year 2050 traffic volumes could be accommodated in the existing or WisDOT proposed roadway width along Main Street between Buena Park Road and STH 36.

- ***Consider the extension of Adams Road to Four Mile Road and the addition of Four Mile Road between the Adams Road extension and Nicholson Road to the planned Racine County arterial street and highway system in the Village of Caledonia.***
 - The addition of the extension of Adams Road to Four Mile Road and the addition of Four Mile Road between the Adams Road extension and Nicholson Road to the Racine County arterial street and highway system would be warranted, based on its spacing with adjacent arterial streets and highways, as it is located adjacent to planned urban development of medium density.

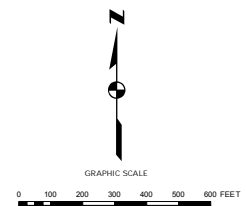
Map 1

POTENTIAL NORTH CROSSING OF THE FOX RIVER IN THE VILLAGE OF WATERFORD



- ARTERIAL STREET OR HIGHWAY
- POTENTIAL NORTH CROSSING OF FOX RIVER

- ENVIRONMENTAL CORRIDORS
- PRIMARY ENVIRONMENTAL CORRIDOR
 - ISOLATED NATURAL RESOURCE AREA
 - SURFACE WATER
 - WETLAND

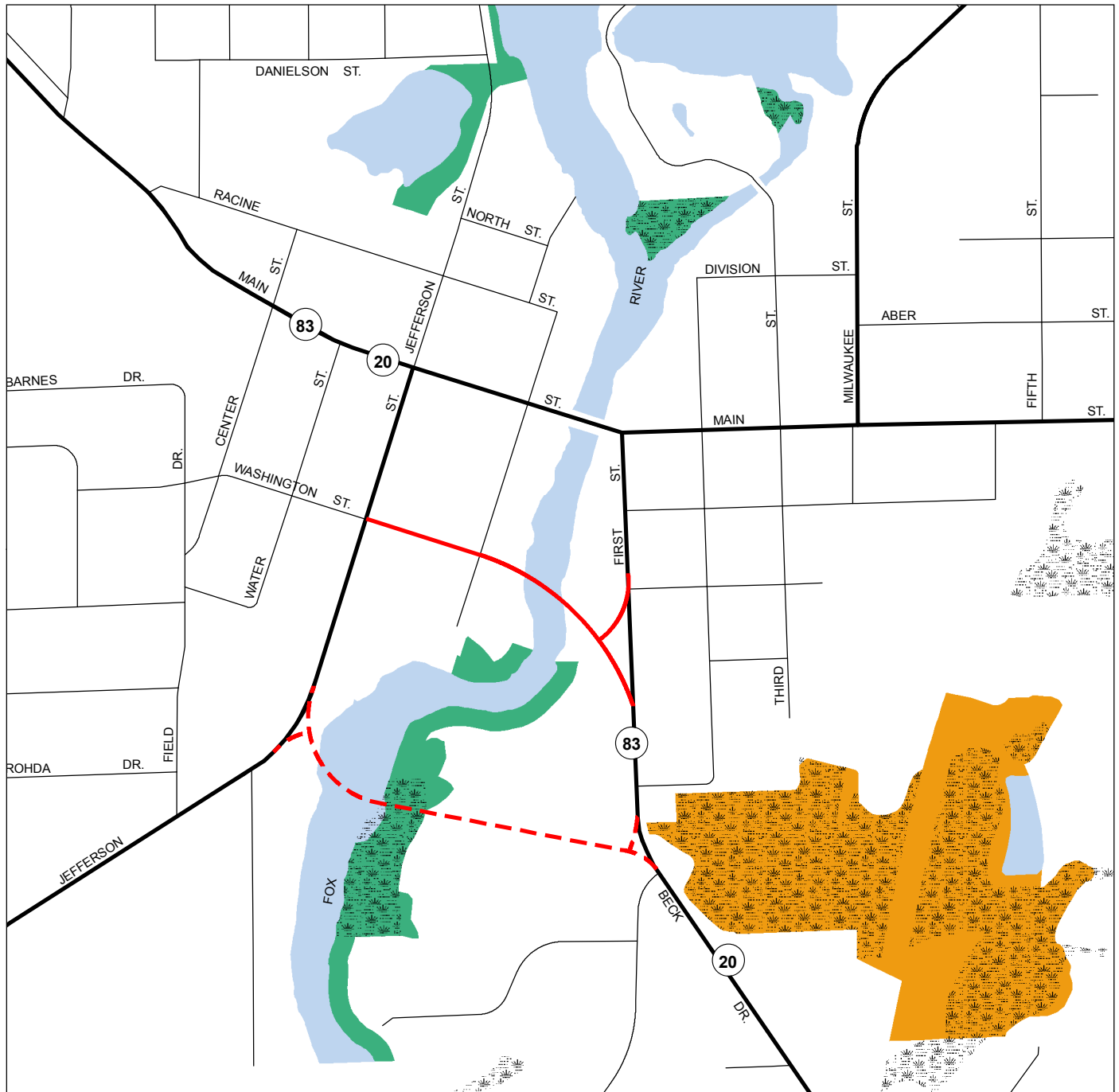


Source: SEWRPC

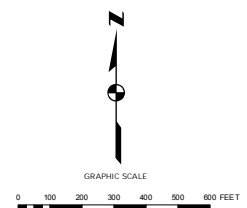
RWH/rwh
I:\Tran\Work\JHSP\RAC\JHSP\MAP\Rac Co Map 1 - Waterford Area - North Crossing.mxd

Map 2

ALTERNATIVE POTENTIAL SOUTH CROSSINGS OF THE FOX RIVER IN THE VILLAGE OF WATERFORD



- | | | | |
|--|----------------------------|--|--------------------------------|
| — | ARTERIAL STREET OR HIGHWAY | | ENVIRONMENTAL CORRIDORS |
| ALTERNATIVE POTENTIAL SOUTH CROSSINGS OF FOX RIVER | | | |
| — | ALTERNATIVE ONE | | PRIMARY ENVIRONMENTAL CORRIDOR |
| - - - | ALTERNATIVE TWO | | ISOLATED NATURAL RESOURCE AREA |
| | | | SURFACE WATER |
| | | | WETLAND |



Source: SEWRPC

RWH/rwh
I:\TranWork\JHSP\IRAC\JHSP\MAP\IRac Co Map 2 - Waterford Area - South Crossing.mxd

- The proposed extension of Adams Road to Four Mile Road and the addition of Four Mile Road between the Adams Road extension and Nicholson Road would provide system continuity between IH 94 and CTH G (N. Main Street).
- Commission staff recommendation: As this segment of roadway (1) is located adjacent to planned urban development of medium density and would provide desirable arterial street and highway spacing, and (2) would provide system continuity between IH 94 and CTH G (N. Main Street), Commission staff recommends that the extension of Adams Road to Four Mile Road and the addition of Four Mile Road between the Adams Road extension and Nicholson Road be included in the preliminary recommended year 2050 regional transportation plan as a planned arterial street and highway.
- ***Consider alternates to providing higher quality access from IH 94 to the City of Racine***

[To be provided prior to meeting]

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- ***Consider potential alternative routes to improve highway access between IH 94 and the City of Racine***
 - The City of Racine Common Council adopted a resolution requesting that Commission staff work with the City of Racine, concerned and affected municipalities in Racine County, and Racine County to consider ways to improve highway access to the City of Racine from IH 94 as part of VISION 2050. The issue of providing higher quality highway access between IH 94 and the City of Racine has long been discussed. A route providing high quality access can be characterized as 1) being direct and understandable; 2) providing adequate traffic carrying capacity; and 3) allowing efficient travel through higher speed limits, limited traffic control, and a high level of direct land access control. Commission staff analyzed the quality of access provided by the various routes between the City of Racine and IH 94 based on these three characteristics. The routes analyzed included the three existing major routes between IH 94 and the City of Racine downtown area (defined as Main Street between State Street and 7th Street): STH 11/STH 32, STH 20/STH 32, and CTH K/STH 38. Three potential alternative routes were also evaluated: Four Mile Road/STH 32, CTH C/STH 38, and CTH KR/STH 32. The following describes the characteristics of each of the six routes analyzed, and assesses whether the segments of these routes provide high quality access between the City of Racine and IH 94.
 - Existing STH 11 (Durand Avenue)/STH 32 Route (10.7 miles):
 - Route Description by Segment
 - STH 11 (Durand Avenue) from IH 94 to Ohio Street/Meachem Road (6.2 Miles):
 - Interchange with IH 94
 - This segment is a 4-lane divided roadway with the exception of approximately 1,000 feet east of CTH H to STH 31 where STH 11 is a 4-lane undivided roadway (a segment of 2.9 miles). Approximately 2.2 miles of the segment, between 90th street and STH 31 (Green Bay Road) and between Roosevelt Avenue/Southwood Drive and Ohio Street/Meachem Road, have inadequate capacity to accommodate current and/or forecast future year 2050 traffic volumes. Planned capacity improvements between Willow Road and STH 31 will address 1.4 miles of inadequate capacity.
 - Speeds are generally consistent with providing high quality access. Approximately 1.0 miles are posted at 55 MPH, 1.6 miles are posted at 45 MPH, and 2.6 miles are posted at 40 MPH. Only 1.0 miles of the segment are posted at 30 MPH, between Wisconsin Street and 84th Street in the Village of Sturtevant, and would be inconsistent with providing high quality access.
 - Between IH 94 and 105th Street there is minimal direct land access to abutting properties. For the remaining 4.0 miles of the segment abutting properties have significant direct access to

STH 11, which is inconsistent with providing high quality access.

- Seven intersections are signalized in this segment. For 3.2 miles west of 90th Street the average signal spacing is 1.6 miles, which is greater than desirable signal spacing of 1.0 miles and east of 90th Street, the average signal spacing of 0.6 miles is greater than the acceptable traffic control spacing of 0.5 miles.
- 4.0 miles of this 6.2 mile segment are inconsistent with providing high quality access based on inadequate capacity, speed, and/or significant direct land access to abutting properties. Planned capacity improvements will not reduce this length.
- STH 11 (Durand Avenue) from Ohio Street/Meachem Road to STH 32 (Sheridan Road/ Racine Street) (2.0 miles):
 - This segment is a 4-lane divided roadway west of Drexel Avenue and a 4-lane undivided roadway east. The capacity along this segment is adequate to accommodate existing and forecast future year 2050 traffic volumes.
 - This segment has a posted speed limit of 30 MPH which is inconsistent with providing high quality access.
 - Access provided to abutting properties along this segment inconsistent with providing high quality access.
 - Five intersections are signalized in this segment. The average signal spacing of 0.4 miles is less than the minimum acceptable traffic control spacing for providing high quality access.
 - This 2.0 mile segment is inconsistent with providing high quality access based on access to abutting properties, posted speeds, and traffic control spacing.
- STH 32 (Sheridan Road/ Racine Street) from STH 11 to STH 20 (Washington Avenue) (1.7 miles):
 - This segment is generally a 4-lane undivided roadway with peak period restrictions to provide 2-lanes in the peak direction. The exception is 0.2 miles between 16th Street and 13th Street where capacity is reduced to one lane in one or both directions. The capacity along this segment is adequate to accommodate existing and forecast future traffic volumes.
 - This segment has a posted speed limit of 30 MPH which is inconsistent with providing high quality access.
 - Access to abutting properties is generally consistent with providing high quality access. Abutting residential properties

have limited access to STH 32 and are generally served by alleys. Nonresidential properties generally have limited access to STH 32.

- Motorists may find the intersection of STH 20 (Washington Avenue) and STH 32 (Racine Street) confusing in the southbound direction where they may be inclined to continue along STH 20 (Washington Avenue) rather than turn left onto STH 32 (Racine Street)
- Four intersections are signalized along this segment. The average signal spacing of 0.4 miles is inconsistent with providing high quality access.
- This 1.7 mile segment is inconsistent with providing high quality access based on speed, and signal spacing.
- STH 32 (Washington Avenue/6th Street/7th Street) between STH 32 (Racine Street) and STH 32 (Main Street) (0.9 miles):
 - This segment is a 4-lane undivided roadway to Marquette Street, between Marquette Street and the roundabout at 6th and 7th Streets capacity is reduced to a 2-lane undivided roadway with bike lanes and parking on both sides of the roadway, and east of the roundabout the one-way pair (6th and 7th Streets) have two lanes. The capacity along this segment is adequate to accommodate existing and forecast future traffic volumes.
 - This segment is has a posted speed limit of 25 MPH which is inconsistent with providing high quality access.
 - Access provided to abutting properties along this segment inconsistent with providing high quality access.
 - Five signals eastbound and six signals westbound exist along this segment. The average signal spacing of 0.2 miles is inconsistent with providing high quality access.
 - This 0.9 mile segment inconsistent with providing high quality access based on capacity restrictions, speed, signal spacing, and access to abutting properties.
- Advantages
 - Interchange with IH 94 and STH 11 (Durand Avenue)
 - For 5.2 miles west of Ohio Street/Meachem Road the posted speeds on this route are 40 MPH or greater.

- For 3.2 miles west of 90th Street traffic control spacing exceeds the desirable 1.0 mile spacing.
- Direct route from the south from IH 94 to the City of Racine Downtown Area.
- Disadvantages
 - 2.2 miles of this route have inadequate capacity to accommodate existing and/or forecast future traffic volumes. The two segments are between 90th street and STH 31 (Green Bay Road) and between Roosevelt Avenue/Southwood Drive and Ohio Street/Meachem Road. Planned capacity improvements will address 1.4 miles of inadequate capacity.
 - 5.5 miles of this route have speeds less than the desirable 40 MPH.
 - 6.8 miles of this route have significant direct access.
 - Significant number of signals on this segment (21 eastbound and 22 westbound).
 - 4.6 miles east of Ohio Street Meachem Road this route has less than the acceptable 0.5 mile traffic control spacing.
 - One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with STH 20 (Washington Avenue) and STH 32 (Racine Street). To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
 - 8.5 miles or 79 percent of the 10.7 mile route is inconsistent with providing high quality access. Planned capacity improvements will not reduce this length.
- Existing STH 20/STH 32 Route (9.5 Miles)
 - Route Description by Segment
 - STH 20 (Washington Avenue) from IH 94 to STH 31 (Green Bay Road) (5.6 Miles)
 - This segment is a 4-lane divided roadway between IH 94 and Oakes Road (a segment of 4.4 miles) and a 6-lane divided roadway between Oakes Road and STH 31 (a segment of 1.2 miles). This 5.6 mile-segment has inadequate capacity to accommodate existing and/or forecast future year 2050 traffic volumes. Planned capacity improvements will address 4.4 miles of inadequate capacity.

- Speeds are generally consistent with providing high quality access. Approximately 1.5 miles are posted at 55 MPH, 1.7 miles are posted at 50 MPH, and 1.5 miles is posted at 45 MPH. Only 0.9 miles of this segment are posted at 35 MPH, between Warwick Way and STH 31, and would be inconsistent with providing high quality access.
- This segment has minimal direct land access to abutting properties, with access to STH 20 being provided via connecting streets.
- 11 intersections are signalized on this segment. For 4.4 miles between IH 94 and Oakes Road the average signal spacing is 0.6 miles, which is greater than the acceptable traffic control spacing of 0.5 miles. However, for 1.2 miles between Oakes Road and STH 31, the average signal spacing is 0.3 miles, which is less than the acceptable traffic control spacing of 0.5 miles.
- This 5.6 mile segment is not consistent with providing high quality access based on inadequate capacity along the entire segment, along with less than desirable traffic control spacing for the 1.2-mile portion west of Oakes Road and posted speeds for the 0.9-mile portion east of Warwick Way. Planned capacity improvements will reduce this length to 1.2 miles.
- STH 20 (Washington Avenue) between STH 31 (Green Bay Road) to STH 32 (Racine Street) (3.0 Miles)
 - This segment is 5-lane divided roadway between STH 31 and Ohio Street (a segment of 0.5 miles) and a 4-lane undivided roadway with peak period parking restrictions to provide 2-lanes in the peak direction between Ohio Street and STH 32 (Racine Street). The capacity along this segment is generally adequate to accommodate current and forecast future year 2050 traffic volumes. An exception is the portion of this segment of STH 20 between Ohio Street and Lathrop Avenue (a segment of 0.5 miles) and the portion between Taylor Avenue and 14th Street (a segment of 0.4 miles), which have inadequate capacity to accommodate current and forecast future traffic volumes.
 - This segment has a posted speed limit of either 25 MPH (a segment of 1.2 miles) or 30 MPH (a segment of 1.8 miles) which is inconsistent with providing high quality access.
 - Significant direct land access provided to abutting properties along this segment is inconsistent with providing high quality access.
 - 11 intersections are signalized on this segment. The average signal spacing of 0.3 miles is less than the acceptable traffic control spacing of 0.5 miles.

- Between West Boulevard and STH 32 (Racine Street) (a segment of 1.5 miles), there is some misdirection along STH 20, which adds extra distance and time to the motorist's trip.
- This 3.0 mile segment is inconsistent with providing high quality access based on speed, significant direct access to abutting properties, less than acceptable signal spacing, inadequate capacity to accommodate existing and/or forecast future year 2050 traffic volumes.
- STH 32 (Washington Avenue/6th Street/7th Street) between STH 32 (Racine Street) and STH 32 (Main Street) (0.9 Miles)
 - This segment is a 4-lane undivided roadway to Marquette Street, between Marquette Street and the roundabout at 6th and 7th Streets capacity is reduced to a 2-lane undivided roadway with bike lanes and parking on both sides of the roadway, and east of the roundabout the one-way pair (6th and 7th Streets) have two lanes. The capacity along this segment is adequate to accommodate existing and forecast future traffic volumes.
 - This segment is has a posted speed limit of 25 MPH which is inconsistent with providing high quality access.
 - Access provided to abutting properties along this segment inconsistent with providing high quality access.
 - Five signals eastbound and six signals westbound exist along this segment. The average signal spacing of 0.2 miles is inconsistent with providing high quality access.
 - This 0.9 mile segment inconsistent with providing high quality access based on capacity restrictions, speed, signal spacing, and access to abutting properties.
- Advantages:
 - Interchange with IH 94 and STH 20 (Washington Avenue).
 - For 4.7 miles west of Warwick Way, this route has posted speeds greater than 40 MPH.
 - 5.6 miles of this route have minimal direct land access to abutting properties.
 - 4.4 miles of this route has traffic control spacing exceeds the acceptable traffic control spacing of 0.5 miles.

- Disadvantages:
 - 6.5 miles of this route have inadequate capacity to accommodate existing and/or forecast future traffic volumes. The three segments are between IH 94 and STH 31, between Ohio Street and Lathrop Avenue, and between Taylor Avenue and 14th Street. Planned capacity improvements will address 4.4 miles of inadequate capacity.
 - The 3.9 miles east of STH 31 (Green Bay Road) have significant direct land access.
 - The 4.8 miles east of Warwick Way have less than desirable posted speeds.
 - Significant number of signals on this segment (27 eastbound and 28 westbound).
 - The 5.1 miles east of Oakes Road have less than the acceptable traffic control spacing of 0.5 miles.
 - Between West Boulevard and STH 32 (Racine Street) there is some misdirection along STH 20 which adds extra distance and time to the motorist's trip.
 - One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with STH 20 (Washington Avenue) and STH 32 (Racine Street). To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
 - The entire 9.5 mile route is inconsistent with providing high quality access. Planned capacity improvements will reduce this by 4.4 miles.
- Existing CTH K/STH 38 (Northwestern Avenue) Route (9.9 miles):
 - Route Description by Segment
 - CTH K (Northwestern Avenue) from IH 94 to STH 38 (5.1 miles):
 - Interchange with IH 94
 - This segment of roadway is a 2-lane roadway west of Airline Road and a 4-lane divided roadway for 0.6 miles east of Airline Road. The capacity is adequate to accommodate current and forecast future year 2050 traffic volumes.
 - Speeds are generally consistent with providing high quality access. Approximately 2.3 miles are posted at 55 MPH, 2.0 miles are posted at 45 MPH. Only 0.8 miles of the segment are posted

at 30 MPH, from a point just west of CTH H (St. Paul Street) to CTH H (Fancher Road) in Franksville, and would be inconsistent with providing high quality access.

- Abutting properties generally have direct access west of Airline Road, with approximately 2.1 miles between CTH H (St. Paul Street) and Airline Road having significant direct access inconsistent with providing high quality access.
 - One intersection is signalized and two intersections are stop controlled. The average traffic control spacing of 2.5 miles is greater than desirable signal spacing of 1.0 miles. The significant spacing between the controlled intersections is consistent with providing high quality access.
 - 2.1 miles of this 5.1 mile segment are inconsistent with providing high quality access based on there being significant direct access to abutting properties.
- STH 38 (Northwestern Avenue) from STH 38 to CTH MM/Rapids Drive (2.2 miles):
 - This segment is a 4-lane divided roadway. With the exception of the 0.1 miles within the extended CTH MM/Rapids Drive intersection, this segment has adequate capacity to accommodate current and forecast future year 2050 traffic volumes.
 - Speeds are generally consistent with providing high quality access. Approximately 2.1 miles are posted at 45 MPH. Only 0.1 miles of the segment are posted at 35 MPH, within the extended intersection of CTH MM/Rapids Drive, and would be inconsistent with providing high quality access.
 - The extended Intersection at CTH MM and Rapids Drive is confusing and heavily channelized in the eastbound direction with only a single lane dedicated for the eastbound through movement to continue along STH 38, adding to the confusion of which route to continue on to reach downtown Racine. Significant guide signage should be provided to direct motorists into the downtown area.
 - Significant access control has been implemented along this segment, with most of the abutting properties provided access through connecting streets, consistent with providing high quality access to the downtown Racine area.
 - Four intersections (the intersections of CTH MM and Rapids Drive have been combined because of their proximity with each other) are signalized on this segment. The average traffic control spacing of 0.6 miles is greater than the acceptable traffic control spacing of 0.5 miles.

- 0.1 miles of this 2.2 mile segment are inconsistent with providing high quality access based on speed.
- STH 38 (Northwestern Avenue) from CTH MM/Rapids Drive to CTH C (Spring Street) (1.6 miles):
 - This segment is a 4-lane divided roadway west of Golf Avenue and a 4-lane undivided roadway with peak hour parking restrictions to provide 2-lanes in the peak direction between Golf Avenue and CTH C (Spring Street). A project to reconstruct STH 38 (Northwestern Avenue) between Golf Avenue and CTH C (Spring Street), with construction beginning in 2016, will reduce the number of lanes within this section from four to two lanes and also reconstruct the two intersections of STH 38 (Northwestern Avenue) with CTH C (Spring Street) and Albert/West High Street as roundabouts. Even with upcoming reduction in capacity, this segment has adequate capacity to accommodate current and forecast future year 2050 traffic volumes.
 - Speeds are inconsistent with providing high quality access. With the exception of 0.5 miles posted at 35 MPH between Rapids Drive and Georgia Avenue, this segment is posted at 30 MPH. This speeds along this segment are inconsistent with providing high quality access.
 - For 1.1 miles, between Golf Avenue and Spring Street, significant direct land access is provided to abutting properties and is inconsistent with providing high quality access.
 - Two intersections along this segment are currently signalized. The WisDOT reconstruction project will replace one of the signalized intersections with a roundabout. This project will also add a roundabout at Albert/West High Streets. Once the WisDOT reconstruction project is completed, the average traffic control spacing will be 1.6 miles would be greater than desirable signal spacing of 1.0 miles.
 - This 1.6 mile segment is inconsistent with providing high quality access based on speed and/or significant direct access to abutting properties.
- STH 38 (Northwestern Avenue/State Street) from CTH C (Spring Street) to STH 32 (Main Street) (1.0)
 - This segment is a 4-lane undivided roadway with parking allowed on some blocks. This segment has adequate capacity to accommodate current and forecast future year 2050 traffic volumes.

- This segment is has a posted speed limit of 30 MPH which is inconsistent with providing high quality access.
- The intersection of Northwestern Avenue, N. Memorial Drive, and State Street is confusing and would benefit from improved guide signage.
- Abutting properties are generally commercial, with off-street parking adequate driveway spacing consistent with providing high quality access.
- Four intersections (the intersections of Dr. Martin Luther King Drive and Marquette Street have been combined because of their proximity with each other) are signalized on this segment. The average signal spacing of 0.3 miles is less than the acceptable traffic control spacing of 0.5 miles.
- This 1.0 mile segment is inconsistent with providing high quality access based on speed and less than acceptable traffic control spacing.

▪ Advantages:

- Interchange with IH 94 and CTH K (Northwestern Avenue).
- Direct route from the north from IH 94 to the City of Racine Downtown Area.
- For 6.4 miles west of CTH MM/Rapids Drive the posted speeds on this route are 45 MPH or greater.
- Very few traffic controlled intersections (10 signalized and 2 stop controlled).
- For 8.3 miles of this route the traffic control spacing exceeds the desirable 1.0 mile spacing.
- 6.8 miles of this route have minimal direct land access to abutting properties.
- 9.8 miles of this route have adequate capacity to accommodate existing and forecast future year 2050 traffic.

▪ Disadvantages:

- The 3.5 miles east of CTH MM have less than desirable posted speed of 40 MPH.
- 3.1 miles of this route have significant direct land access.

- The 1.0 miles east of CTH C (Spring Street) have less than the acceptable traffic control spacing of 0.5 miles.
 - Two intersections present a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with CTH MM and Rapids Drive and the intersection of State Street, N. Memorial Drive, and Northwestern Avenue. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
 - 4.8 miles or 48 percent of the 9.9 mile route are inconsistent with providing high quality access.
- Proposed Four Mile Road/STH 32 (Douglas Avenue) Route (11.8 Miles):
 - Route Description by Segment
 - Four Mile Road from IH 94 to STH 32 (Douglas Avenue) (7.7 Miles)
 - Would require the construction of a new roadway between Adams Road and Four Mile Road to have a more direct route to the IH 94 interchange at STH 20.
 - This segment is a 2-lane roadway, with the exception of approximately 0.3 miles east of STH 32 which is a 4-lane divided roadway. This segment would have adequate capacity to accommodate existing and forecast future year 2050 traffic volumes. The portion of Four Mile Road between the potential new roadway and a point approximately 0.3 miles east of STH 32 have shoulder widths that may be less than desirable for an arterial roadway. As well, portions of Four Mile Road has poor pavement condition—particularly between the potential new roadway and CTH H (Howell Avenue) and between Nicholson Avenue and a point approximately 0.3 miles east of STH 32. Thus, this portion of Four Mile Road would need to be reconstructed to arterial design standards to provide a high level of access.
 - Speeds are consistent with providing high quality access. Approximately 0.3 miles are posted at 55 MPH, 4.7 miles are posted at 45 MPH, and 2.7 miles are posted at 40 MPH. The portion of the 1.0-mile potential new roadway between Adams Road and Four Mile Road is assumed to have a posted speed of 45 MPH, consistent with the posted speed on adjacent segments of Four Mile Road.
 - This segment has minimal direct land access to abutting properties.

- Two intersections are signalized and six intersections are stop controlled along this segment. The average traffic control spacing of 1.1 miles exceeds the desirable traffic control spacing of 1.0 miles.
- This 7.7 mile segment is consistent with providing high quality access. The only exception is the 6.1-mile portion of Four Mile Road with inadequate shoulder widths and poor pavement condition that would need to be addressed at the time Four Mile Road is reconstructed.
- STH 32 (Douglas Avenue/Hamilton Avenue/Main Street) from Four Mile Road to STH 38 (State Street) (4.1 miles)
 - This segment of roadway is a 4-lane with a two way left turn lane between Four Mile Road and a point about 0.25 miles north of Three Mile Road, a 4-lane undivided roadway between a point about 0.25 miles north of Three Mile Road and Marquette Street with peak period parking restrictions to provide two lanes in the peak direction south of Melvin Avenue, a 2-lane roadway with parking on both sides between Marquette Street and Main Street (a segment of 0.6 miles), and a 4-lane undivided roadway with peak period parking restrictions to provide two lanes in the peak direction between Hamilton Street and Dodge Street and no parking between Dodge Street and STH 38 (State Street). This segment has adequate capacity to accommodate current and forecast future year 2050 traffic volumes.
 - This segment has posted speeds that are inconsistent with providing high quality access. Approximately 1.0 miles are posted at 35 MPH (between Four Mile Road and Three Mile Road), 2.6 miles are posted at 30 MPH (between 3-Mile Road and Hamilton Street), and 0.5 miles is posted at 25 MPH (between Douglas Avenue and State Street).
 - There is some direct land access between Four Mile Road and Three Mile Road, but not enough to affect providing high quality access along this portion of STH 32. However, there is significant direct land access south of Three Mile Road (a segment of 3.0 miles) inconsistent with providing high quality access.
 - Eight intersections are signalized and one intersection is stop controlled on this segment. For 2.6 miles between Four Mile Road and Goold Street the average signal spacing is 0.9 miles, which is greater than the acceptable traffic control spacing of 0.5 miles. However, for 1.5 miles between Goold Street and State Street the average traffic control spacing is of 0.2 miles, which is less than the acceptable traffic control spacing of 0.5 miles.

- The need to turn onto the Hamilton Street portion of STH 32 presents difficulties to providing a direct and understandable route into the City of Racine downtown area. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
 - This 4.1 mile segment is inconsistent with providing high quality access based less than desirable posted speeds and less than acceptable traffic control spacing.
- Advantages
 - For 7.7 miles between IH 94 and STH 32, this route has posted speeds greater than 40 MPH or greater.
 - Moderate number of traffic controlled intersections (10 signalized and 7 stop controlled).
 - For 7.7 miles between IH 94 and STH 32, this route has traffic control spacing that exceeds the desirable traffic control spacing of 1.0 miles.
 - For 2.6 miles between Four Mile Road and Goold Street, this route has traffic control spacing that exceeds the acceptable traffic control spacing of 0.5 miles.
 - This route has adequate capacity to accommodate existing and forecast future year 2050 traffic.
 - Disadvantages
 - No IH 94 interchange at Four Mile Road, which would require construction of a new roadway to create a more direct connection between the IH 94 interchange at CTH K and Four Mile Road.
 - While the entire 11.8 mile route would have adequate capacity for existing and forecast future year 2050 traffic volumes, a 6.1-mile portion of Four Mile Road would need to be reconstructed to arterial design standards.
 - The 4.1 miles of STH 32 south of Four Mile Road have less than desirable posted speeds.
 - The 1.5 miles south of Goold Street have less than the acceptable traffic control spacing of 0.5 miles.
 - The 3.0 miles south of Three Mile Road have significant direct land access inconsistent with providing high quality access.

- As this route would require a motorist to first travel north to Four Mile Road from the IH 94 interchange at CTH K, this route would be indirect and thus inconsistent with providing high quality access from IH 94 to the City of Racine.
 - The need to turn onto the Hamilton Street portion of STH 32 presents difficulties to providing a direct and understandable route into the City of Racine downtown area. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
 - The existing route of CTH K/STH 38 (Northwestern Avenue)—immediately south of Four Mile Road—already provides a high quality, more direct route into the City of Racine downtown area.
 - 4.1 miles or 35 percent of the 11.8 mile route are inconsistent with the provision of high quality access. This does not include the 6.1-mile portion of Four Mile Road that would need to be reconstructed to arterial design standards.
- Proposed CTH C (Spring Street)/STH 38 Route (9.7 miles):
 - Route description by Segment
 - CTH C (Spring Street) from IH 94 to STH 31 (Green Bay Road) (6.7 miles):
 - No direct access to IH 94. Required to utilize frontage roads to gain access at STH 20.
 - This segment of roadway is a 2-lane roadway between STH 20 and Airline Road (a segment of 4.8 miles) and a 4-lane divided roadway between Airline Road and STH 31 (a segment of 1.9 miles). The capacity on this segment is adequate to accommodate current and forecast future year 2050 traffic volumes.
 - Speeds are generally consistent with providing high quality access. Approximately 2.6 miles are posted at 50 MPH, 1.5 miles are posted at 45 MPH, and 1.9 miles posted at 40 MPH. The only exception is the 0.7 miles of frontage roads between STH 20 and CTH C which are posted at 35 MPH.
 - For 5.5 miles west of Sunnyslope Drive, abutting properties have minimal direct access to CTH C. East of Sunnyslope Drive abutting properties have significant direct access (a segment of 1.2 miles) and would be inconsistent with providing high quality access.

- Seven intersections are signalized and one intersection is stop controlled. The average traffic control spacing of 1.0 miles is consistent with the desirable traffic control spacing of 1.0 miles.
- 1.9 miles of this 6.7 mile segment is inconsistent with providing high quality access based on speed and significant direct land access to abutting properties.
- CTH C (Spring Street) from STH 31 (Green Bay Road) to STH 38 (Northwestern Avenue) (2.0 miles):
 - This segment of roadway is a 4-lane divided roadway with peak period parking restrictions to provide 2-lanes in the peak direction. The capacity along this segment is adequate to accommodate current and forecast future year 2050 traffic volumes.
 - Speeds on this segment are inconsistent with providing high quality access. Approximately 0.6 miles between STH 31 and Meadowbrook Road are posted at 35 MPH and 1.4 miles are posted at 30 MPH.
 - Access provided to abutting properties is inconsistent with providing high quality access.
 - Three intersections are signalized on this segment. A project to reconstruct STH 38 (Northwestern Avenue) between Golf Avenue and CTH C (Spring Street) will replace the signal at CTH C (Spring Street). The average signal spacing of 0.7 miles under the current configuration exceeds the acceptable traffic control spacing of 0.5 miles. The replacement of one signal with a roundabout would increase the average traffic control spacing on this segment to 1.0 miles, consistent with the desirable traffic control spacing of 1.0 miles.
 - This 2.0 mile segment is inconsistent with providing high quality access based on speed and access to abutting properties.
- STH 38 (Northwestern Avenue/State Street) from CTH C (Spring Street) to STH 32 (Main Street) (1.0 miles)
 - This segment is a 4-lane undivided roadway with parking allowed on some blocks. This segment has adequate capacity to accommodate current and forecast future year 2050 traffic volumes.
 - This segment is has a posted speed limit of 30 MPH which is inconsistent with providing high quality access.

- The intersection of Northwestern Avenue, N. Memorial Drive, and State Street is confusing and would benefit from improved guide signage.
- Abutting properties are generally commercial, with off-street parking adequate driveway spacing consistent with providing high quality access.
- Four intersections (the intersections of Dr. Martin Luther King Drive and Marquette Street have been combined because of their proximity with each other) are signalized on this segment. The average signal spacing of 0.3 miles is less than the acceptable traffic control spacing of 0.5 miles.
- This 1.0 mile segment is inconsistent with providing high quality access based on speed and less than acceptable traffic control spacing.

▪ Advantages

- With the exception of the need to use frontage roads to access IH 94 at the STH 20 interchange, CTH C (Spring Street) is a direct route from the west.
- For 6.0 miles west of STH 31 Drive the posted speeds on this route are 40 MPH or greater.
- Very few traffic controlled intersections (13 signalized and 1 stop controlled).
- For 8.7 miles, this route has traffic control spacing that exceeds the desirable 1.0 mile spacing.
- This route has adequate capacity to accommodate existing and forecast future year 2050 traffic.

▪ Disadvantages

- No Interchange with IH 94. Motorists would be required to utilize the frontage roads to access IH 94 at the interchange with STH 20.
- The 3.7 miles east of STH 31 have less than the desirable posted speed of 40 MPH.
- The 1.0 miles east of CTH C (Spring Street) have less than the acceptable traffic control spacing of 0.5 miles.
- 3.2 miles of the route have significant direct land access inconsistent with providing high quality access.

- One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area— intersection of State Street, N. Memorial Drive, and Northwestern Avenue. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
 - 3.9 miles or 40 percent of the 9.7 mile route are inconsistent with providing high quality access.
- Proposed CTH KR (County Line Road)/STH 32 Route (12 miles):
 - Route Description by Segment
 - CTH KR (County Line Road) from IH 94 to STH 32 (Sheridan Road) (7.3 miles)
 - Interchange with IH 94
 - This segment is a 2-lane undivided roadway. The segment would have adequate capacity to accommodate current and forecast future year 2050 traffic volumes. However, this segment has less than desirable shoulder widths, thus this portion would need to be reconstructed with a cross section that would provide adequate shoulders width.
 - The posted speeds are consistent with providing high quality access. Approximately 2.9 miles is posted at 55 MPH and 4.4 miles is posted at 45 MPH.
 - This segment has minimal direct land access to abutting properties.
 - Four intersections are signalized and three intersections are stop controlled in this segment. The average intersection control spacing of 1.2 miles exceeds the desirable traffic control spacing of 1.0 miles.
 - This 7.3 mile segment is generally consistent with providing high quality access. The exception on this segment is the inadequate shoulder width which would need to be addressed at the time CTH KR is reconstructed.
 - STH 32 (Sheridan Road) from CTH KR (County Line Road) to STH 11 (Durand Avenue) (2.1 miles)
 - This segment is a 4-lane divided roadway. The segment would have adequate capacity to accommodate current and forecast future year 2050 traffic volumes.

- Speeds are consistent with providing high quality access. Approximately 1.8 miles are posted at 45 MPH and 0.3 miles are posted at 40 MPH.
- This segment has minimal direct land access to abutting properties
- Two intersections are signalized in this segment. The average traffic control spacing of 1.1 miles exceeds the desirable traffic control spacing of 1.0 miles.
- This 2.1 mile segment is consistent with providing high quality access.
- STH 32 (Sheridan Road/ Racine Street) from STH 11 to STH 20 (Washington Avenue) (1.7 miles):
 - This segment is generally a 4-lane undivided roadway with peak period restrictions to provide 2-lanes in the peak direction. The exception is 0.2 miles between 16th Street and 13th Street where capacity is reduced to one lane in one or both directions. The capacity along this segment is adequate to accommodate existing and forecast future traffic volumes.
 - This segment has a posted speed limit of 30 MPH which is inconsistent with providing high quality access.
 - Access to abutting properties is generally consistent with providing high quality access. Abutting residential properties have limited access to STH 32 and are generally served by alleys. Nonresidential properties generally have limited access to STH 32.
 - Motorists may find the intersection of STH 20 (Washington Avenue) and STH 32 (Racine Street) confusing in the southbound direction where they may be inclined to continue along STH 20 (Washington Avenue) rather than turn left onto STH 32 (Racine Street)
 - Four intersections are signalized along this segment. The average signal spacing of 0.4 miles is inconsistent with providing high quality access.
 - This 1.7 mile segment is inconsistent with providing high quality access based on speed, and signal spacing.
- STH 32 (Washington Avenue/6th Street/7th Street) between STH 32 (Racine Street) and STH 32 (Main Street) (0.9 miles):
 - This segment is a 4-lane undivided roadway to Marquette Street, between Marquette Street and the roundabout at 6th and 7th

Streets capacity is reduced to a 2-lane undivided roadway with bike lanes and parking on both sides of the roadway, and east of the roundabout the one-way pair (6th and 7th Streets) have two lanes. The capacity along this segment is adequate to accommodate existing and forecast future traffic volumes.

- This segment is has a posted speed limit of 25 MPH which is inconsistent with providing high quality access.
- Access provided to abutting properties along this segment inconsistent with providing high quality access.
- Five signals eastbound and six signals westbound exist along this segment. The average signal spacing of 0.2 miles is inconsistent with providing high quality access.
- This 0.9 mile segment inconsistent with providing high quality access based on capacity restrictions, speed, signal spacing, and access to abutting properties.

▪ Advantages

- Interchange with IH 94 at CTH KR
- For 9.4 miles, between IH 94 and STH 11, the posted speeds on this route are 40 MPH or greater.
- Moderate number of traffic controlled intersections (15 signalized intersections eastbound, 16 signalized intersections westbound, and 3 stop controlled intersections).
- For 9.4 miles, this route has traffic control spacing that exceeds the desirable 1.0 mile spacing.
- From the south CTH KR and STH 32 provide a fairly direct route from IH 94 to the City of Racine.
- This route has adequate capacity to accommodate existing and forecast future year 2050 traffic.

▪ Disadvantages

- The 2.6 miles north of STH 11 have less than the desirable posted speed of 40 MPH.
- The 2.6 miles north of STH 11 have less than the acceptable traffic control spacing of 0.5 miles.
- The 0.9 miles north of STH 20 have significant direct land access inconsistent with providing high quality access.

- One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with STH 20 (Washington Avenue) and STH 32 (Racine Street). To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.
- The shoulders along CTH KR would need to be improved to bring CTH KR to arterial design standards.
- 2.6 miles or 22 percent of the 12.0 mile route are inconsistent with providing high quality access.

○ Conclusions and recommendations:

The conclusions and recommendations will be provided based on discussion and recommendation by the Racine County Jurisdictional Highway Planning Committee.

* * *

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COMPARISON OF EXISTING AND POTENTIAL ALTERNATIVE ROUTES TO PROVIDE HIGH QUALITY HIGHWAY ACCESS BETWEEN IH 94 AND THE CITY OF RACINE

Route	Route Length (miles)	Length of Route by Posted Speed (miles)	Length of Route with Capacity Inadequate to Accommodate Existing and/or Future AWDT (miles)	Length of Route with Traffic Control Spacing Less than the Desirable 1.0 Mile and Acceptable 0.5 Mile (miles)	Length of Route with Significant Direct Land Access (miles)	Total Length of Route with One or More Issues Inconsistent with Providing High Quality Highway Access (miles) ^a	Advantages	Disadvantages
Existing STH 11 (Durand Avenue)/STH 32	10.7	55 MPH: 1.0 45 MPH: 1.6 40 MPH: 2.6 30 MPH: 4.7 25 MPH: 0.8 Average Speed Limit: 36.6 MPH	2.2 (Planned capacity improvements will reduce this by 1.4 miles.)	Desirable: 7.5 Acceptable: 4.6	6.8	8.5 (Planned capacity improvements will not reduce this length)	<ul style="list-style-type: none">• Interchange with IH 94 and STH 11 (Durand Avenue)• For 5.2 miles west of Ohio Street/Meachem Road the posted speeds on this route are 40 MPH or greater.• For 3.2 miles west of 90th Street traffic control spacing exceeds the desirable 1.0 mile spacing.• Direct route from the south from IH 94 to the City of Racine Downtown Area.	<ul style="list-style-type: none">• 2.2 miles of this route have inadequate capacity to accommodate existing and/or forecast future traffic volumes. The two segments are between 90th street and STH 31 (Green Bay Road) and between Roosevelt Avenue/Southwood Drive and Ohio Street/Meachem Road. Planned capacity improvements will address 1.4 miles of inadequate capacity.• 5.5 miles of this route have speeds less than the desirable 40 MPH.• 6.8 miles of this route have significant direct access.• Significant number of signals on this segment (21 eastbound and 22 westbound).• 4.6 miles east of Ohio Street Meachem Road this route has less than the acceptable 0.5 mile traffic control spacing.• One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with STH 20 (Washington Avenue) and STH 32 (Racine Street). To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.• 8.5 miles or 79 percent of the 10.7 mile route is inconsistent with providing high quality access. Planned capacity improvements will not reduce this length.

COMPARISON OF EXISTING AND POTENTIAL ALTERNATIVE ROUTES TO PROVIDE HIGH QUALITY HIGHWAY ACCESS BETWEEN IH 94 AND THE CITY OF RACINE (continued)

Route	Route Length (miles)	Length of Route by Posted Speed (miles)	Length of Route with Capacity Inadequate to Accommodate Existing and/or Future AWDT (miles)	Length of Route with Traffic Control Spacing Less than the Desirable 1.0 Mile and Acceptable 0.5 Mile (miles)	Length of Route with Significant Direct Land Access (miles)	Total Length of Route with One or More Issues Inconsistent with Providing High Quality Highway Access (miles) ^a	Advantages	Disadvantages
Existing STH 20/STH 32 (Washington Avenue)	9.5	55 MPH: 1.5 50 MPH: 1.7 45 MPH: 1.5 35 MPH: 0.9 30 MPH: 1.8 25 MPH: 2.1 Average Speed Limit: 39.3 MPH	6.5 (Planned capacity improvements will reduce this by 4.4 miles.)	Desirable: 9.5 Acceptable: 5.1	3.9	9.5 (Planned capacity improvements will reduce this by 4.4 miles.)	<ul style="list-style-type: none">• Interchange with IH 94 and STH 20 (Washington Avenue).• For 4.7 miles west of Warwick Way, this route has posted speeds greater than 40 MPH.• 5.6 miles of this route have minimal direct land access to abutting properties.• 4.4 miles of this route has traffic control spacing exceeds the acceptable traffic control spacing of 0.5 miles.	<ul style="list-style-type: none">• 6.5 miles of this route have inadequate capacity to accommodate existing and/or forecast future traffic volumes. The three segments are between IH 94 and STH 31, between Ohio Street and Lathrop Avenue, and between Taylor Avenue and 14th Street. Planned capacity improvements will address 4.4 miles of inadequate capacity.• The 3.9 miles east of STH 31 (Green Bay Road) have significant direct land access.• The 4.8 miles east of Warwick Way have less than desirable posted speeds.• Significant number of signals on this segment (27 eastbound and 28 westbound).• The 5.1 miles east of Oakes Road have less than the acceptable traffic control spacing of 0.5 miles.• Between West Boulevard and STH 32 (Racine Street) there is some misdirection along STH 20 which adds extra distance and time to the motorist's trip.• One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with STH 20 (Washington Avenue) and STH 32 (Racine Street). To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.• The entire 9.5 mile route is inconsistent with providing high quality access. Planned capacity improvements will reduce this by 4.4 miles.
Existing CTH K/STH 38 (Northwestern Avenue)	9.9	55 MPH: 2.3 45 MPH: 4.1 35 MPH: 0.6 30 MPH: 2.9 Average Speed Limit: 42.3 MPH	0.1	Desirable: 1.6 Acceptable: 1.0	3.1	4.8	<ul style="list-style-type: none">• Interchange with IH 94 and CTH K (Northwestern Avenue).• Direct route from the north from IH 94 to the City of Racine Downtown Area.• For 6.4 miles west of CTH MM/Rapids Drive the posted speeds on this route are 45 MPH or greater.• Very few traffic controlled intersections (10 signalized and 2 stop controlled).• For 8.3 miles of this route the traffic control spacing exceeds the desirable 1.0 mile spacing.• 6.8 miles of this route have minimal direct land access to abutting properties.• 9.8 miles of this route have adequate capacity to accommodate existing and forecast future year 2050 traffic.	<ul style="list-style-type: none">• The 3.5 miles east of CTH MM have less than desirable posted speed of 40 MPH.• 3.1 miles of this route have significant direct land access.• The 1.0 miles east of CTH C (Spring Street) have less than the acceptable traffic control spacing of 0.5 miles.• Two intersections present a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with CTH MM and Rapids Drive and the intersection of State Street, N. Memorial Drive, and Northwestern Avenue. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.• 4.8 miles or 48 percent of the 9.9 mile route are inconsistent with providing high quality access.

COMPARISON OF EXISTING AND POTENTIAL ALTERNATIVE ROUTES TO PROVIDE HIGH QUALITY HIGHWAY ACCESS BETWEEN IH 94 AND THE CITY OF RACINE (continued)

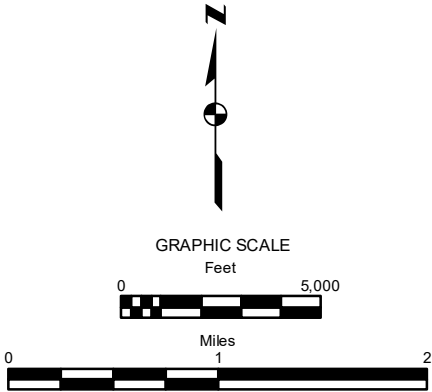
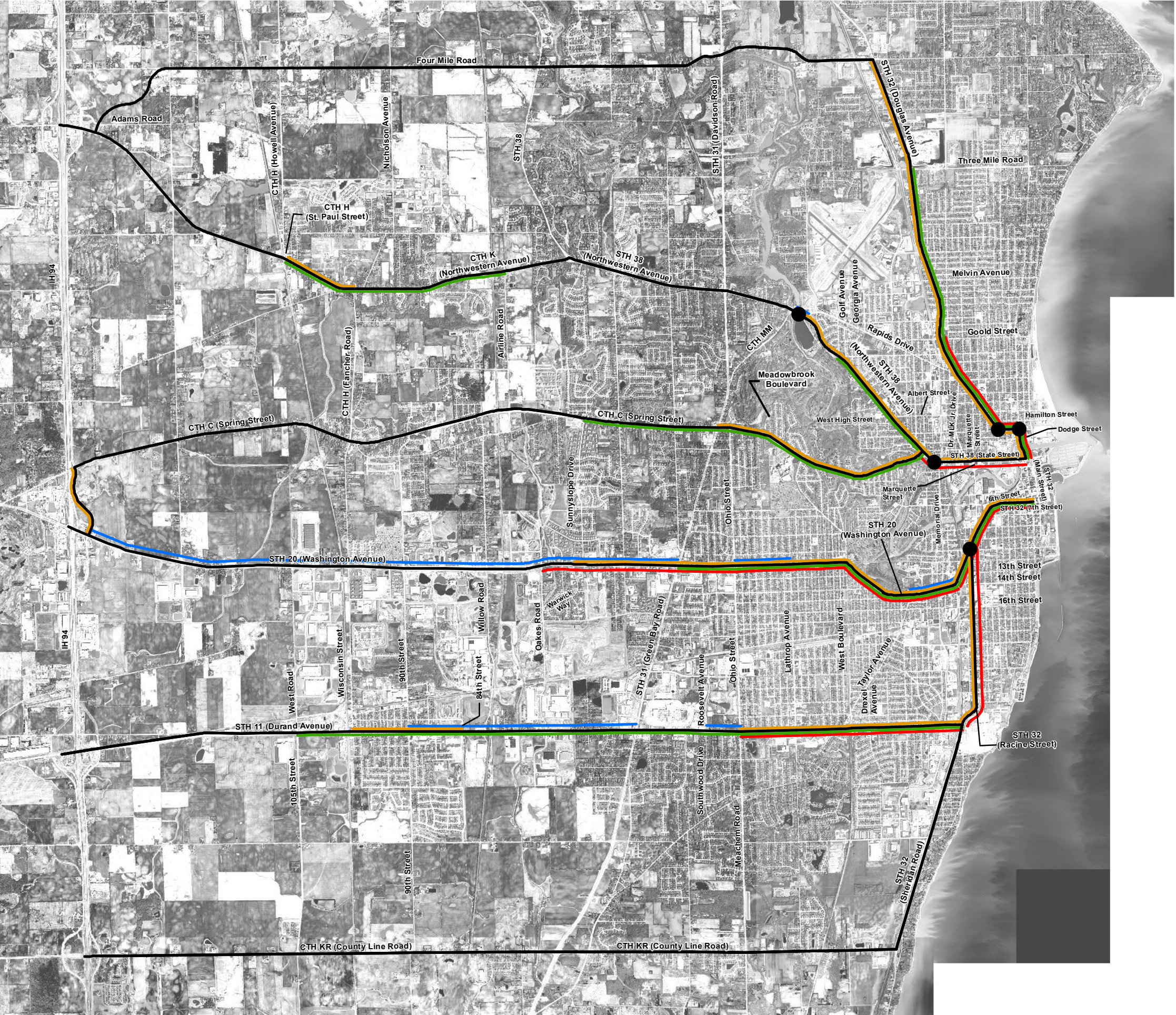
Route	Route Length (miles)	Length of Route by Posted Speed (miles)	Length of Route with Capacity Inadequate to Accommodate Existing and/or Future AWDT (miles)	Length of Route with Traffic Control Spacing Less than the Desirable 1.0 Mile and Acceptable 0.5 Mile (miles)	Length of Route with Significant Direct Land Access (miles)	Total Length of Route with One or More Issues Inconsistent with Providing High Quality Highway Access (miles) ^a	Advantages	Disadvantages
Proposed Four Mile Road/STH 32 (Douglas Avenue)	11.8	55 MPH: 0.3 45 MPH: 4.7 40 MPH: 2.7 35 MPH: 1.0 30 MPH: 2.6 25 MPH: 0.5 Average Speed Limit: 39.1 MPH	0.0	Desirable: 4.1 Acceptable: 1.5	3.0	4.1	<ul style="list-style-type: none">For 7.7 miles between IH 94 and STH 32, this route has posted speeds greater than 40 MPH or greater.Moderate number of traffic controlled intersections (10 signalized and 7 stop controlled).For 7.7 miles between IH 94 and STH 32, this route has traffic control spacing that exceeds the desirable traffic control spacing of 1.0 miles.For 2.6 miles between Four Mile Road and Goold Street, this route has traffic control spacing that exceeds the acceptable traffic control spacing of 0.5 miles.This route has adequate capacity to accommodate existing and forecast future year 2050 traffic.	<ul style="list-style-type: none">No IH 94 interchange at Four Mile Road, which would require construction of a new roadway to create a more direct connection between the IH 94 interchange at CTH K and Four Mile Road.While the entire 11.8 mile route would have adequate capacity for existing and forecast future year 2050 traffic volumes, a 6.1-mile portion of Four Mile Road would need to be reconstructed to arterial design standards.The 4.1 miles of STH 32 south of Four Mile Road have less than desirable posted speeds.The 1.5 miles south of Goold Street have less than the acceptable traffic control spacing of 0.5 miles.The 3.0 miles south of Three Mile Road have significant direct land access inconsistent with providing high quality access.As this route would require a motorist to first travel north to Four Mile Road from the IH 94 interchange at CTH K, this route would be indirect and thus inconsistent with providing high quality access from IH 94 to the City of Racine.The need to turn onto the Hamilton Street portion of STH 32 presents difficulties to providing a direct and understandable route into the City of Racine downtown area. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.The existing route of CTH K/STH 38 (Northwestern Avenue)—immediately south of Four Mile Road—already provides a high quality, more direct route into the City of Racine downtown area.4.1 miles or 35 percent of the 11.8 mile route are inconsistent with the provision of high quality access. This does not include the 6.1-mile portion of Four Mile Road that would need to be reconstructed to arterial design standards.

COMPARISON OF EXISTING AND POTENTIAL ALTERNATIVE ROUTES TO PROVIDE HIGH QUALITY HIGHWAY ACCESS BETWEEN IH 94 AND THE CITY OF RACINE (continued)

Route	Route Length (miles)	Length of Route by Posted Speed (miles)	Length of Route with Capacity Inadequate to Accommodate Existing and/or Future AWDT (miles)	Length of Route with Traffic Control Spacing Less than the Desirable 1.0 Mile and Acceptable 0.5 Mile (miles)	Length of Route with Significant Direct Land Access (miles)	Total Length of Route with One or More Issues Inconsistent with Providing High Quality Highway Access (miles) ^a	Advantages	Disadvantages
Proposed CTH C (Spring Street)	9.7	50 MPH: 2.6 45 MPH: 1.5 40 MPH: 1.9 35 MPH: 1.3 30 MPH: 2.4 Average Speed Limit: 40.3 MPH	0.0	Desirable: 1.0 Acceptable: 1.0	3.2	3.9	<ul style="list-style-type: none">With the exception of the need to use frontage roads to access IH 94 at the STH 20 interchange, CTH C (Spring Street) is a direct route from the west.For 6.0 miles west of STH 31 Drive the posted speeds on this route are 40 MPH or greater.Very few traffic controlled intersections (13 signalized and 1 stop controlled).For 8.7 miles, this route has traffic control spacing that exceeds the desirable 1.0 mile spacing.This route has adequate capacity to accommodate existing and forecast future year 2050 traffic.	<ul style="list-style-type: none">No Interchange with IH 94. Motorists would be required to utilize the frontage roads to access IH 94 at the interchange with STH 20.The 3.7 miles east of STH 31 have less than the desirable posted speed of 40 MPH.The 1.0 miles east of CTH C (Spring Street) have less than the acceptable traffic control spacing of 0.5 miles.3.2 miles of the route have significant direct land access inconsistent with providing high quality access.One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—intersection of State Street, N. Memorial Drive, and Northwestern Avenue. To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.3.9 miles or 40 percent of the 9.7 mile route are inconsistent with providing high quality access.
Proposed CTH KR (County Line Road)/STH 32	12.0	55 MPH: 2.9 45 MPH: 6.2 40 MPH: 0.3 30 MPH: 1.7 25 MPH: 0.9 Average Speed Limit: 43.7 MPH	0.0	Desirable: 2.6 Acceptable: 2.6	0.9	2.6	<ul style="list-style-type: none">Interchange with IH 94 at CTH KRFor 9.4 miles, between IH 94 and STH 11, the posted speeds on this route are 40 MPH or greater.Moderate number of traffic controlled intersections (15 signalized intersections eastbound, 16 signalized intersections westbound, and 3 stop controlled intersections).For 9.4 miles, this route has traffic control spacing that exceeds the desirable 1.0 mile spacing.From the south CTH KR and STH 32 provide a fairly direct route from IH 94 to the City of Racine.This route has adequate capacity to accommodate existing and forecast future year 2050 traffic.	<ul style="list-style-type: none">The 2.6 miles north of STH 11 have less than the desirable posted speed of 40 MPH.The 2.6 miles north of STH 11 have less than the acceptable traffic control spacing of 0.5 miles.The 0.9 miles north of STH 20 have significant direct land access inconsistent with providing high quality access.One intersection presents a difficulty to providing a direct and understandable route into the City of Racine downtown area—the intersection of with STH 20 (Washington Avenue) and STH 32 (Racine Street). To improve the understandability of this route, perhaps guide signage to more clearly direct motorists between IH 94 and downtown Racine could be provided.The shoulders along CTH KR would need to be improved to bring CTH KR to arterial design standards.2.6 miles or 22 percent of the 12.0 mile route are inconsistent with providing high quality access.

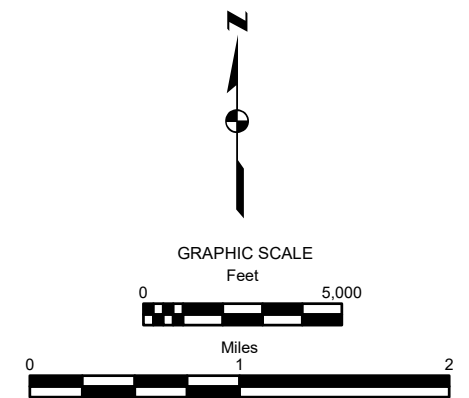
^a The portion of the route is included in the calculation if it has a posted speed less than 40 miles per hour; the existing capacity is inadequate to accommodate existing or forecast future traffic volumes; the traffic control spacing is less than the acceptable 0.5 mile spacing; and/or there is significant direct land access .







SEGMENTS OF EXISTING AND
PROPOSED ROUTES FROM IH 94
TO THE CITY OF RACINE
DOWNTOWN AREA INCONSISTENT
WITH PROVIDING HIGH QUALITY
HIGHWAY ACCESS



- Confusing Intersections
- Route Centerlines
- Speed Limit Less Than 40 MPH
- Significant Direct Land Access
- Inadequate Capacity
- Less than the Acceptable 0.5 Mile Traffic Control Spacing

EXISTING AND PROPOSED ROUTES FROM IH 94 TO THE CITY OF RACINE DOWNTOWN AREA



-  Existing CTH K/STH 38 Route
-  Existing STH 20/STH 32 Route
-  Existing STH 11/STH 32 Route
-  Proposed CTH KR/STH 32 Route
-  Proposed 4-Mile Road/STH 32 Route
-  Proposed CTH C/STH 38 Route

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN RACINE COUNTY: YEAR 2050 PRELIMINARY RECOMMENDED PLAN

